

## EDUCATION

- Ph.D., 2013 University of Guelph, School of Environmental Sciences (Hydrogeology)  
M.Sc., 2005 University of Waterloo, Department of Earth Sciences (Hydrogeology)  
B.Sc., 2002 University of Montana, Geology Department (Geology)

## ACADEMIC APPOINTMENTS

- 2018-current Assistant Professor, Department of Earth and Environmental Sciences, University of Iowa  
2016-current Adjunct Professor, School of Environmental Sciences, University of Guelph  
2017-2018 PhD Research Associate, G360 Institute for Groundwater Research, University of Guelph  
2013-2016 Postdoctoral Fellow, G360 Institute for Groundwater Research, University of Guelph

## RESEARCH AND TECHNICAL EXPERIENCE

- 2008-2013\* Senior Project Manager, G360 Institute for Groundwater Research, University of Guelph  
2008-2012 Graduate Research Assistant, School of Environmental Sciences, University of Guelph  
2005-2007 Research Associate, Department of Earth Sciences, University of Waterloo  
2002-2005 Graduate Research Assistant, Department of Earth Sciences, University of Waterloo  
2001-2002 Research/Lab Technician, Geology Department, University of Montana

\*part time during my full time PhD studies 2008-2012

## INVITED PRESENTATIONS

- 2019 NGWA Conference on Fractured Rock and Groundwater (**keynote**)  
2019 NovCare - Novel Methods for Subsurface Characterization and Monitoring (**keynote**)  
2019 Iowa State Department of Geological and Atmospheric Sciences seminar  
2019 University of Iowa Civil and Environmental Engineering seminar  
2019 Iowa Groundwater Association Spring Meeting  
2018 Wisconsin Groundwater Association Annual State Conference (**keynote**)  
2016 Battelle Conference on Remediation of Chlorinated and Recalcitrant Compounds  
2015 AECOM Webinar  
2014 University of Wisconsin Department of Geoscience Weeks Lecture  
2013 Solinst Symposium on High Resolution, Depth Discrete Groundwater Monitoring  
2012 Minnesota Groundwater Association Spring Conference  
2010 NWGA Groundwater and Fractured Rock Virtual Conference  
2010 Dane County GeoDays Workshop

## HONORS AND AWARDS

- 2008-2009 Mary Edmunds Williams Scholarship, University of Guelph  
2003 Waterloo Barrier Inc. Research Grant, University of Waterloo  
2002 President's Recognition Award, University of Montana

## FUNDING

- 2019 \$45,000 – Undergraduate Research Experience in Field Based Groundwater Research, University Consortium for Field-Focused Groundwater Contamination Research, PI: Jessica Meyer (Univ. of Iowa)
- 2018-2023 estimated \$400,000/year (project specific funding, renewable annually) – Final Work Plan, Hydrite Chemical Co., Cottage Grove, PI: Beth Parker (Univ. of Guelph), Co-PI: Jessica Meyer (Univ. of Iowa)
- 2012-2017 \$1,500,000 (project specific funding) – Continued Groundwater Contamination Research & Remediation Assessment, Hydrite Chemical Co., Cottage Grove, PI: Beth Parker (Univ. of Guelph), Co- Co-PI: Jessica Meyer (Univ. of Guelph)

## TEACHING AND MENTORING

### Courses Taught

- Fall U. Iowa, EES 1085, Fundamentals of Environmental Science
- Spring U. Iowa, EES 4630, Physical Hydrogeology

### Lectures for Professional Short Courses/Workshops

- 2016 Wisconsin Department of Natural Resources, Madison, Wisconsin, High Resolution Hydrogeological Investigations of Contaminated Fractured Porous Media
- 2015 IAH-CNC Conference, Waterloo, Ontario, Contaminant Behavior in Fractured Sedimentary Rock: New Techniques for Improved Site Conceptual Models
- 2015 42<sup>nd</sup> IAH Congress, Rome, Italy, Aquitard Hydrogeology: Clayey Deposits and Fractured Rock
- 2011 Wisconsin Department of Natural Resources, Madison, Wisconsin, High Resolution Site Characterization

### Graduate Student Mentoring

Name	Degree	Institution	Role	Date
Chris Morgan	MSc	Univ. of Guelph		2019
Andrew Buckley	MASc	Univ. of Guelph	co-supervisor	2017
Lucas Ribeiro	MASc	Univ. of Guelph		2016
Brian Ndirangu	MSc	Técnico Lisboa	field method	2018
Tara Harvey	MSc	Univ. of Guelph	instruction and	2016
Paulo Casado	MSc	Univ. of Waterloo	review of	2010
Ziheng Miao	MSc	Univ. of Waterloo	reports/theses	2008

### Undergraduate Student Mentoring

Name	Objective	Institution	Role	Date
Elizabeth Occhi	research experience	Univ. of Iowa	supervisor	2019
Scott Cousins	BSc thesis	Univ. of Waterloo	co-supervisor	2007

### Student Committees

Name	Role	Institution	Date
Stephanie Surine	PhD advisory committee member	Univ. of Iowa	2019

## PUBLICATIONS

\* Indicates a student author/presenter

### Peer Reviewed Journal Articles (published)

- Harvey, T.M., E. Arnaud, **J.R. Meyer**, C.M. Steelman, and B.L. Parker. 2019. Characterizing scales of hydrogeological heterogeneity in ice-marginal sediments in Wisconsin, USA. *Hydrogeology Journal*, 27(6): 1949-1968, DOI: 10.1007/s10040-019-01978-1.
- Lima, G., **J.R. Meyer**, K. Khosla, K. Dunfield, and B.L. Parker. 2018. Spatial variability of microbial communities in the matrix of fractured sandstone within a contaminant plume with mixed organics. *Journal of Contaminant Hydrogeology*, 218: 110-119, DOI: 10.1016/j.jconhyd.2018.10.001.
- Runkel, A.C., R.G. Tipping, **J.R. Meyer**, J.R. Steenberg, A.J. Retzler, B.L. Parker, J.A. Green, J.D. Barry, and P.M. Jones. 2018. A multidisciplinary-based conceptual model of a fractured sedimentary bedrock aquitard: improved prediction of aquitard integrity. *Hydrogeology Journal*, 26(7): 2133-2159, DOI: 10.1007/s10040-018-1794-2.
- Haslauer, C.P., **J.R. Meyer**, A. Bárdossy, and B.L. Parker. 2017. Estimating a representative value and proportion of true zeros for censored analytical data with applications to contaminated site assessment. *Environmental Science and Technology*, 51(13): 7502-7510, DOI: 10.1021/acs.est.6b05385.
- Stelman, C.M., **J.R. Meyer**, and B.L. Parker. 2017. Multi-dimensional investigation of bedrock heterogeneity/unconformities at a DNAPL-impacted site. *Groundwater*, 55(4): 532-549, DOI: 10.1111/gwat.12514.
- Meyer, J.R.**, B.L. Parker, E. Arnaud, and A.C. Runkel. 2016. Combining high resolution vertical gradients and sequence stratigraphy to delineate hydrogeologic units for a contaminated sedimentary rock aquifer system. *Journal of Hydrology*, 534: 505-523, DOI: 10.1016/j.jhydrol.2016.01.015.
- Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2014. Characteristics of high resolution hydraulic head profiles and vertical gradients in fractured sedimentary rocks. *Journal of Hydrology*, 517: 493-507, DOI: 10.1016/j.jhydrol.2014.05.050.
- Lima, G., B.L. Parker, and **J.R. Meyer**. 2012. Dechlorinating microorganisms in a sedimentary rock matrix contaminated with a mixture of VOCs. *Environmental Science & Technology*, 46(11): 5756-5763, DOI: 10.1021/es300214f.
- Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2008. Detailed hydraulic head profiles as essential data for defining hydrogeologic units in layered fractured sedimentary rock. *Environmental Geology*, 56(1): 27-44, DOI: 10.1007/s00254-007-1137-4.

### Non-Peer Reviewed Articles

- Cherry, J.A., B.L. Parker, S.W. Chapman, **J.R. Meyer**, and A.A. Pierce. 2017. Depth discrete multilevel monitoring in fractured rock: state of the technology and implications. 15th Biennial Ground Water Division Conference, October 14-18, Stellenbosch, South Africa. 12 p.
- Meyer, J.R.** and B.L. Parker. 2014. Considerations for fracture network characterization bias imposed by long open boreholes. International Discrete Fracture Network Engineering Conference, October 19-22, Vancouver, Ontario. 10 p.

Runkel, A.C., R.R. Tipping, P.M. Jones, **J.R. Meyer**, B.L. Parker, E.C. Alexander Jr., and J.R. Steenberg. 2013. A multilevel monitoring system provides new insights into a bedrock aquitard in southeastern Minnesota. *Technical Article for the Minnesota Groundwater Association Newsletter*, 32(2): 12-13.

**Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2011. Design strategies for high-resolution multilevel monitoring systems for fractured rock sites. *Água E Meio Ambiente Subterrâneo*, 3(22): 32-33.

#### Technical Reports

**J.R. Meyer** and B.L. Parker. 2019. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 2018 Progress Report. 706 p.

Parker, B.L., **J.R. Meyer**, and J.A. Cherry. 2018. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 2017 Progress Report. 332 p.

Parker, B.L., **J.R. Meyer**, and J.A. Cherry. 2017. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 2016 Progress Report. 432 p.

Parker, B.L., **J.R. Meyer**, J.A. Cherry, and P. Casado. 2016. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 2015 Progress Report. 400 p.

Cherry, J.A., B.L. Parker, M. Einarson, S.W. Chapman, and **J.R. Meyer**. 2015. Overview of depth-discrete multilevel groundwater monitoring technologies: focus on groundwater monitoring in areas of oil and gas well stimulation in California. *In Recommendations on Model Criteria for Groundwater Sampling, Testing, and Monitoring of Oil and Gas Development in California*, Lawrence Livermore National Laboratory Technical Report 669645. 80 p.

Parker, B.L., J.A. Cherry, **J.R. Meyer**, and P. Casado. 2015. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 2014 Progress Report. 420 p.

Runkel, A.C., R.R. Tipping, J.A. Green, P.M. Jones, **J.R. Meyer**, B.L. Parker, J.R. Steenberg, and A.J. Retzler. 2014. Hydrogeologic properties of the St. Lawrence Aquitard, southeastern Minnesota. Minnesota Geological Survey Open File Report 14-04. 153 p.

Parker, B.L., J.A. Cherry, **J.R. Meyer**, and P. Casado. 2014. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 2013 Progress Report. 362 p.

Parker, B.L., J.A. Cherry, **J.R. Meyer**, and P. Casado. 2013. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 2012 Progress Report. 487 p.

Parker, B.L., J.A. Cherry, and **J.R. Meyer**. 2012. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 5 Progress Report. 173 p.

Parker, B.L., J.A. Cherry, and **J.R. Meyer**. 2011. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 4 Progress Report. 168 p.

Parker, B.L., J.A. Cherry, and **J.R. Meyer**. 2010. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 3 Progress Report. 355 p.

Parker, B.L., J.A. Cherry, and **J.R. Meyer**. 2009. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 2 Progress Report. 273 p.

**Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2009. 5-1: Technical memorandum: Evaluation of fracture network characteristics based on detailed hydraulic head profiles. *In Site Conceptual Model for the*

Migration and Fate of Contaminants in Groundwater at the Santa Susana Field Laboratory, Simi, California, Overview and 20 Site Conceptual Model Elements. 59 p.

**Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2009. 5-2: Insights concerning aquitards and fracture network characteristics from detailed head profiles in fractured sandstone. *In* Site Conceptual Model for the Migration and Fate of Contaminants in Groundwater at the Santa Susana Field Laboratory, Simi, California, Overview and 20 Site Conceptual Model Elements. 12 p.

Parker, B.L., J.A. Cherry, and **J.R. Meyer**. 2008. University Consortium for Field Focused Groundwater Contamination Research, Hydrite Cottage Grove, Year 1 Progress Report. 378 p.

Parker, B.L., **J.R. Meyer**, S.W. Chapman, and J.R. Kennel. 2008. Rock core VOC preparation, sampling, analysis, and data management standard operating procedure. 61 p.

Parker, B.L., J.C. Hurley, D.C. Austin, and **J.R. Meyer**. 2003. Protocol for collecting and analyzing rock core samples for volatile organic chemical concentrations and physical property measurements: prepared for Hydrite Chemical Company, Cottage Grove, Wisconsin. 24 p.

#### Peer Reviewed Conference Presentations

**Meyer, J.R.** and B.L. Parker. 2019. Geologic controls on the contaminant phase and mass distribution in a mixed organics DNAPL source zone in sedimentary rock: insights from high resolution field data. AGU Fall Meeting, December 9-13, San Francisco, California.

\*Morgan, C., **J.R. Meyer**, and B.L. Parker. 2019. Use of digital outcrop photogrammetry to inform fracture network characteristics for discrete fracture network modelling of a sandstone aquifer. NovCare Conference on Novel Methods for Subsurface Characterization and Monitoring, May 28-31, Waterloo, Ontario.

Pehme, P., B.L. Parker, and **J.R. Meyer**. 2019. High resolution time-elevation-head profiles from temporary deployed sensors in boreholes for assessing variable flow conditions in fractured rock aquifers. NovCare Conference on Novel Methods for Subsurface Characterization and Monitoring, May 28-31, Waterloo, Ontario.

Pehme, P., B.L. Parker, and **J.R. Meyer**. 2019. Temporary deployment of sensors: a cost-effective approach for high resolution spatial and temporal assessment of hydraulic conditions in fractured bedrock boreholes. 10<sup>th</sup> International Groundwater Quality Conference, September 9-12, Liège, Belgium.

Shikaze, S.G., D.G. Abbey, D. Puddephatt, G. Merritt, **J.R. Meyer**, P.J. Martin, and B.L. Parker. 2019. Integration of high-resolution hydraulic head data with equivalent porous media numerical modeling. NovCare Conference on Novel Methods for Subsurface Characterization and Monitoring, May 28-31, Waterloo, Ontario. (poster)

**Meyer, J.R.**, B.L. Parker, L.A.F.S. Ribeiro, C.A. Morgan, and A.C. Runkel. 2018. High resolution head profiles reveal new insights about aquitard mechanisms in sedimentary rocks. GSA North-Central Section 52<sup>nd</sup> Annual Meeting, Geoscience Returns to the Heartland, April 16-17, Ames, Iowa.

\*Morgan, C., **J.R. Meyer**, E. Arnaud, A.C. Runkel, and B.L. Parker. 2018. Photogrammetry informed fracture network characteristics in a sandstone aquifer for 3-dimensional discrete fracture network simulation. AGU Fall Meeting, December 10-14, Washington, DC. (poster)

- Ndirangu, B., B.L. Parker, and **J.R. Meyer**. 2018. Temporal evolution of a NAPL source zone up-gradient of a pump & treat system in a fractured sandstone aquifer. AGU Fall Meeting, December 10-14, Washington, DC. (poster)
- Pehme, P., Parker, B.L., and **J.R. Meyer**. 2018. Gaining insights about hydrostratigraphy and flow through fractured rock by using high sensitivity thermal gradient logging. Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), March 25-29, Nashville, Tennessee.
- Runkel, A.C., J. Steenberg, A. Retzler, **J.R. Meyer**, P. Pehme, B.L. Parker, and R.G. Tipping. 2018. Fracture stratigraphy linked to multilevel borehole monitoring in lower Paleozoic bedrock of the central midcontinent, North America. GSA North-Central Section 52<sup>nd</sup> Annual Meeting, Geoscience Returns to the Heartland, April 16-17, Ames, Iowa.
- \*Buckley, A., **J.R. Meyer**, D.C. Austin-Blaine, and B.L. Parker. 2017. Comparing rock matrix contaminant profiles downgradient of a DNAPL source after 10 years of groundwater dissolution. 2017 NGWA Conference on Fractured Rock and Groundwater, October 2-3, Burlington, Vermont.
- Harvey, T. E. Arnaud, B.L. Parker, **J.R. Meyer** and C.M. Steelman. 2017. Integration of high-resolution datasets for hydrogeologic characterization of contaminated glacial sediments in south central Wisconsin. GAC-MAC 2017 - Back to Where It Began, May 14-18, Kingston, Ontario.
- Meyer, J.R.**, C.M. Steelman, A. Buckley, and B.L. Parker. 2017. Influence of erosional geologic complexity on DNAPL distribution and plume characteristics in fractured sedimentary rocks. 33<sup>rd</sup> Annual AEHS Conference on Soils, Sediments, Water, and Energy, October 16-19, Amherst, Massachusetts.
- Plank, C., M. Shultz, **J.R. Meyer**, M. Einarson, and R. Cramer. 2017. Sedimentological logging techniques to maximize insight from borehole geologic logs: making the most of your critical opportunity to observe actual subsurface conditions. Battelle Fourth International Symposium on Bioremediation and Sustainable Environmental Technologies, May 22-25, Miami, Florida. (poster)
- Meyer, J.R.**, B.L. Parker, E. Arnaud, and A.C. Runkel. 2016. Hydraulically calibrated sequence stratigraphy for improved hydrogeologic unit delineation in fractured sedimentary rocks. Battelle: Tenth International Conference on Remediation of Chlorinated and Recalcitrant Compounds, May 22-26, Palm Springs, California.
- Parker, B.L., **J.R. Meyer**, J.D. Munn, and J.R. Kennel. 2016. Source water protection: a case for aquitard-focused characterization. 43<sup>rd</sup> IAH International Congress, Groundwater and society: 60 years of IAH, September 25-29, Montpellier, France.
- \*Buckley, A., **J.R. Meyer**, and B.L. Parker. 2015. Depth-discrete contaminant mass composition and concentration distribution emanating from an aged DNAPL source zone in sedimentary rock. IAH - CNC 2015 Waterloo, Canadian Hydrogeology, October 27-30, Waterloo, Ontario. (poster)
- Einarson, M., J.A. Cherry, B.L. Parker, S.W. Chapman, and **J.R. Meyer**. 2015. Overview of groundwater monitoring technologies to support groundwater monitoring in California oil and gas fields (California SB4 monitoring program). 30th Biennial Groundwater Conference & 24th Groundwater Resources Association Annual Meeting, Drought, Water Quality & Sustainability, October 6-7, Sacramento, California.

- Harvey, T., E. Arnaud, B.L. Parker, **J.R. Meyer**, and C.M. Steelman. 2015. Hydrogeological characterization of complex Quaternary ice marginal sediments at a contaminated site in south central Wisconsin. GSA Annual Meeting, November 1-4, Baltimore, Maryland. (poster)
- Meyer, J.R.**, B.L. Parker, E. Arnaud, and A.C. Runkel, 2015. Role of high-resolution data sets to improve site conceptual model development for a contaminated sedimentary rock site in southern, Wisconsin. GSA North-Central Section 49th Annual Meeting - From the Proterozoic to the Anthropocene, May 19-20, Madison, Wisconsin.
- Meyer, J.R.**, B.L. Parker, E. Arnaud, A.C. Runkel, L. Weaver, S.G. Shikaze, and D.G. Abbey, 2015. Hydrogeology and sequence stratigraphy correlations used to inform a regional scale groundwater flow model for sedimentary rock. IAH - CNC 2015 Waterloo, Canadian Hydrogeology, October 27-30, Waterloo, Ontario.
- Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2015. High resolution head and vertical gradient profiles: providing fundamental insights for sedimentary rock flow systems. Aqua 2015 - 42nd IAH Congress - Hydrogeology: Back to the Future, September 13-18, Rome, Italy.
- Pehme, P., B.L. Parker, J.A. Cherry, and **J.R. Meyer**. 2015. Advances in the application of thermal logging techniques for hydrophysical characterization of flow through fractured rock. IAH - CNC 2015 Waterloo, Canadian Hydrogeology, October 27-30, Waterloo, Ontario.
- \*Ribeiro, L.A.F.S., **J.R. Meyer**, and B.L. Parker. 2015. Fracture network and groundwater flux characterization using a suite of high resolution methods in a sedimentary bedrock aquifer. IAH - CNC 2015 Waterloo, Canadian Hydrogeology, October 27-30, Waterloo, Ontario. (poster)
- Robinson, J., L. Slater, K. Keating, B. Parker, C. Rose, **J.R. Meyer**, C. Johnson, T. Robinson, P. Pehme, S. Chapman, F. Day-Lewis. 2015. Evaluating petrophysical relationships in fractured rock using geophysical measurements. AGU Fall Meeting, December 14-18, San Francisco, California.
- Robinson, J., L. Slater, B.L. Parker, K. Keating, F. Day-Lewis, C. Johnson, C. Rose, T. Robinson, **J.R. Meyer**, P. Pehme, S.W. Chapman. 2015. Investigating geophysical techniques to characterize pore geometric properties controlling contaminant mass transport in fractured rock. GSA Annual Meeting, November 1-4, Baltimore, Maryland.
- Shikaze, S.G., B. Zhang, D.G. Abbey, **J.R. Meyer**, B.L. Parker. 2015. Parameter estimation in a regional groundwater flow model to represent site-specific high resolution head profiles. IAH - CNC 2015 Waterloo, Canadian Hydrogeology, October 27-30, Waterloo, Ontario.
- Casado, P., R. Aravena, B.L. Parker, **J.R. Meyer**, and C. Steelman. 2014. High resolution assessment of different controls affecting the fate of a mixed organic contaminants plume within a glacial sediments/sedimentary rock aquifer. 41st International Association of Hydrogeologists Congress, Groundwater: Challenges and Strategies, September 15-19, Marrakech, Morocco.
- Meyer, J.R.**, B.L. Parker, E. Arnaud, and A.C. Runkel. 2014. High resolution vertical gradients for identifying  $K_v$  contrasts and delineating hydrogeologic units at a contaminated sedimentary rock field site. Abstract 101-10, 2014 GSA Abstracts with Programs, October 19-22, Vancouver, British Columbia.
- Casado, P., R. Aravena, B.L. Parker, **J.R. Meyer**, and G. Lima. 2013. Fate of a mixed organic plume until a local discharge area within a glacial sediments and sedimentary rock aquifer. 8<sup>th</sup> IAHS International Groundwater Quality Conference (GQ13): Managing Groundwater Quality to Support Competing Human and Ecological Needs, April 21-26, Gainesville, Florida.

- Meyer, J.R.** and Parker, B.L. 2013. Head and vertical hydraulic gradient profiles for improved flow system conceptual and numerical modeling. NGWA Theis Conference, Accelerating the Use of New and Developing Tools and Technologies for Groundwater Monitoring, Modeling, and Management: Theory to Practice, November 8-10, Phoenix, Arizona.
- Weaver, L., E. Arnaud, D. Abbey, S. Shikaze, B.L. Parker, and **J.R. Meyer**. 2013. Evaluation of structural uncertainty in conceptual hydrogeologic model development, GeoMontreal: Geoscience for Sustainability, September 29-October 3, Canadian Geotechnical Society, Montreal, Quebec.
- Weaver, L., E. Arnaud, D. Abbey, S. Shikaze, B.L. Parker, and **J.R. Meyer**. 2013. Examining the influence of enhanced hydrogeologic knowledge on structural uncertainty in three-dimensional reconstructions of glacial sediment, GSA North-Central Section 47th Annual Meeting, May 2-3, Kalamazoo, Michigan.
- Casado, P., R. Aravena, B.L. Parker, and **J.R. Meyer**. 2012. Shallow, mixed organic plume evolution in heterogeneous sediments. 39th International Association of Hydrogeologists Congress, Confronting Global Change, September 16-21, Niagara Falls, Ontario.
- Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2012. Identifying aquitards in sequences of fractured sedimentary rock hydrogeologic units. 39th International Association of Hydrogeologists Congress, Confronting Global Change, September 16-21, Niagara Falls, Ontario.
- Khosla, K., G.P. Lima, P. Casado, **J.R. Meyer**, R. Aravena, K.E. Dunfield, and B.L. Parker. 2012. Microbial community diversity in a spatially variable mixed volatile organic contaminant groundwater plume. Canadian Society of Microbiologists 62nd Annual General Meeting, June 20-23, Vancouver, British Columbia. (poster)
- Casado, P., R. Aravena, B.L. Parker, and **J.R. Meyer**. 2012. Chlorinated compounds fate within a multi-phase contaminant plume along the local groundwater flow system until the discharge zone. Eighth International Conference on Remediation of Chlorinated and Recalcitrant Compounds, May 21-24, Monterey, California.
- MacCormack, K.E., J.M. Slomka, E. Arnaud, B.L. Parker, C.H. Eyles, and **J.R. Meyer**. 2011. Optimizing the impact of localized high quality data in regional scale subsurface modelling. Abstract 197752, 2001 GSA Abstracts with Programs, October, 9-12, Minneapolis, Minnesota.
- Parker, B.L., G. Lima, S.W. Chapman, and **J.R. Meyer**. 2011. Effects of matrix biodegradation on plume evolution and attenuation in fractured sedimentary rock. Battelle Memorial Institute International Symposium on Bioremediation and Sustainable Environmental Technologies, June 27-30, Reno, Nevada.
- Lima, G., **J.R. Meyer**, and B.L. Parker. 2011. Evidence of contaminant biodegradation in fractured sedimentary rock matrices. RemTEC Summit 2011, May 16-19, Chicago, Illinois.
- Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2010. Identification of aquitards in fractured sedimentary rock. Abstract 273-2, 2010 GSA Abstracts with Programs, October/November 31-3, Denver, Colorado.
- Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2009. Characteristics of fracture networks and hydrogeologic units: implications provided by detailed hydraulic head profiles. *EOS Trans AGU*, 90 (22), Jt. Assem. Suppl., Abstract IA31A-04, The Meeting of the Americas, May 24-27, Toronto, Ontario.
- Miao, Z., R. Aravena, B.L. Parker, J.A. Cherry, **J.R. Meyer**, and D. Hunkeler. 2009. Evaluation of a chlorinated compounds plume in a fractured sandstone aquifer in mid-west, US. *EOS Trans AGU*, 90



(22), Jt. Assem. Suppl., Abstract IA31A-06, The Meeting of the Americas, May 24-27, Toronto, Ontario.

Miao, Z., R. Aravena, B.L. Parker, J.A. Cherry, **J.R. Meyer**, and D. Hunkeler. 2009. Fate of chlorinated compounds in a fractured sandstone aquifer in the U.S. Midwest. In *Situ and On-Site Bioremediation-2009: Proceedings of the 10th International In Situ and On-Site Bioremediation Symposium*, May 5-8, Baltimore, Maryland.

**Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2009. Hydrogeologic characterization for a plume investigation in fractured sedimentary rock: using detailed head profiles and an outside-in approach. Groundwater Resources Association of California; Groundwater Monitoring: Design, Analysis, Communication & Integration with Decision Making Conference; February 25-26, Orange, California.

**Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2007. High resolution head profiles used to define hydrogeologic units for improved characterization of a contaminated fractured sedimentary rock site. U.S. EPA/NGWA Fractured Rock Conference: State of the Science and Measuring Success in Remediation, September 24-26, Portland, Maine.

**Meyer, J.R.**, B.L. Parker, J.A. Cherry, and P.E. Pehme. 2005. Defining the hydrostratigraphy of a contaminated, multi-layered sedimentary rock aquifer system: combining new and conventional data sets. Abstract 12-10, 2005 GSA Abstracts with Programs, October 16-19, Salt Lake City, Utah.

**Meyer, J.R.**, B.L. Parker, and J.A. Cherry. 2004. Retardation of a large organic contaminant plume in fractured sedimentary rock. Abstract 167-3, 2004 GSA Abstracts with Programs, November 7-10, Denver, Colorado.

Bradbury, K.R., D.J. Hart, D.L. LePain, B.L. Parker, D.C. Austin, and **J.R. Meyer**. 2004. Vertical distribution of hydraulic conductivity in Cambrian sandstones in south-central Wisconsin. U.S. EPA/NGWA Fractured Rock Conference: State of the Science and Measuring Success in Remediation, September 13-15, Portland, Maine.

## SERVICE

### College/University

2019 Mentor, Interdisciplinary Geospatial Approaches to Watershed Science REU in the Department of Geographical and Sustainability Sciences

### Professional

#### *Conference Sessions*

2019 Co-convenor, AGU Fall Meeting, Characterizing hydrological processes and contaminant migration in fractured rocks and karst systems: combining experimental, field and modeling approaches

#### *Manuscript Reviewer*

2019-current Water Resources Research  
2019-current Journal of Contaminant Hydrology  
2019-current Hydrogeology Journal  
2019-current Groundwater Monitoring and Remediation  
2015-current Journal of Hydrology  
2015 U.S. EPA (Groundwater Issue Paper)

#### *Mentoring*

2018 John Mann mentor in applied hydrogeology, North Central GSA conference  
2015 John Mann mentor in applied hydrogeology, North Central GSA conference

### **Community Outreach**

- 2012 Groundwater demonstration for University of Guelph College Royal public open house
- 2012 Groundwater tools and concepts demonstration for high school science fair participants
- 2012 Discrete fracture network approach demonstration for Brazilian delegates
- 2011 Presentation, Ontario Ministry of Economic Development/Trade International Media Tour
- 2011 Multilevel well monitoring demonstration for Santa Susana Field Laboratory public tour

### **PROFESSIONAL MEMBERSHIPS**

- 2010-current International Association of Hydrogeologists
- 2008-current American Geophysical Union
- 2008-current Geological Society of America
- 2003-current National Ground Water Association